

Cristoloveanu et al. (SOI).

The Patent Office asserts that since Seung-Ik Jun and/or Cristoloveanu et al. discuss (electric) field-aided lateral crystallization (FALC) that it would have been obvious to one of ordinary skill in the art to combine FALC with the teachings of Arai et al. and Maekawa to achieve high-quality (poly-crystalline) films. However, combining Seung-Ik Jun and/or Cristoloveanu et al. with Maekawa and Arai et al. fails to render the subject invention obvious.

One significant factor in obviousness is enablement. If one who is skilled in the art is not enabled to do something, that something is not obvious. Seung-Ik Jun presents only a proposed fabrication technology for producing thin film transistors by crystallizing an amorphous silicon layer using heat and electric fields. Seung-Ik Jun does not state that the proposed fabrication technology works. Additionally, Seung-Ik Jun suggests experiments for testing the feasibility of that proposed fabrication technology. Seung-Ik Jun also does not state that those experiments will be sufficient to verify or practice the proposed fabrication technology, only that those tests will be performed. Therefore, given Seung-Ik Jun, one who was skilled in the art of fabricating thin film transistors would not be enabled to fabricate a thin film transistor by crystallizing an amorphous silicon layer using both heat and electric fields as claimed. At best, one who was skilled in the art would be aware of a potential approach to fabricating thin film transistors. Thus, Seung-Ik Jun does not enable FALC or thin film transistors fabricated using FALC.

Cristoloveanu et al. simply teach using heat and electric fields to convert amorphous silicon into poly-silicon. Significantly, there is no discussion of using their method to fabricate thin-film transistors by converting amorphous silicon into poly-silicon using heat and electric fields. Even more significantly, there is no teaching that their technique would enable the production of produce thin-film transistors.

Therefore, from Maekawa, Arai et al., Seung-Ik Jun and Cristoloveanu et al., the claimed

invention would not have been obvious to one who was skilled in the art at the time of filing.

Therefore, it is respectfully submitted that independent claims 1, 14, and 25 are allowable.


Furthermore as claims 2-13, 15-24, and 26-36 depend from allowable base claims, those claims are also allowable. Therefore, the 35 U.S.C. §103 rejections of claims 1-36 are improper and should be withdrawn.

In view of the foregoing remarks, all claims are believed to be in condition for immediate allowance. Allowance of the application is respectfully solicited.

Respectfully submitted,

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